U.S. Patent Application Serial No. 10/088,094 Amendment Under 37 C.F.R. §1.111 dated August 4, 2003 Reply to the Office Action of May 9, 2003

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

Claim 1 (Currently Amended): A dynamic optimizing method for speed data used for preparing a speed instruction pattern fed to a servo motor in a positioning device, wherein comprising:

a speed pattern generator for calculating a desired speed pattern when a moving distance, speed, acceleration time and deceleration time are inputted is provided; and the

specifying a speed pattern preparation cycle is allowed to be specified by a user without a possibility that the speed data changing a maximum value of the speed data and a minimum resolution of the speed data are changed.

Claim 2 (Currently Amended): The dynamic optimizing method for speed data according to Claim 1, wherein further comprising selecting a combination of the speed data maximum value and the minimum resolution of the speed data is allowed to be selected by a the user.

Claim 3 (Currently Amended): The dynamic optimizing method for speed at according to Claim 1, wherein when a <u>the</u> user specifies the speed pattern preparation cycle, the <u>a</u> decimal part of the speed data is shifted to the right or left so as to prevent the speed data maximum value and <u>the</u> minimum resolution of the speed data from being changed.

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Claim 4 (Currently Amended): A positioning device using a servo motor, comprising: a moving instruction input unit inputting a moving instruction;

a speed pattern preparation cycle unit inputting a speed pattern preparation cycle specified by a user without changing a maximum value of speed data and a minimum resolution of the speed data;

a speed pattern preparation unit for inputting a moving instruction from the moving instruction input unit, preparing a speed instruction pattern based on the moving instruction, the speed data, and the speed pattern preparation cycle;

a speed instruction unit for outputting a speed instruction <u>per cycle</u> based on the speed instruction pattern from the speed pattern preparation unit in accordance with the speed instruction cycle specified by a user; and

a servo control unit for driving the servo motor based on the speed instruction from the speed instruction unit.

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## **Amendments to the Drawings:**

The attached sheet of drawings include changes to Figures 3(a) and 3(b). This sheet, which includes Figures 3(a) and 3(b) replaces the original sheet including Figures 3(a) and 3(b). Each of Figures 3(a) and 3(b) have been labeled as prior art.